A15

was treated with 4.1 mL (6.6 mmol) of a 1.6 M *n*-BuLi solution at –70°C. The mixture was allowed to warm to 0°C and treated with 0.75 g (3.2 mmol) of $ZrCl_4$. The resulting reaction mixture was refluxed under stirring for 3 h, then the yellow precipitate was filtered, washed twice with hexane, dried and finally recrystallized from CH_2Cl_2/hexane. Yield 0.32 g (21%). The title compound was characterized by ^{1}H-NMR spectroscopy.--

Please replace the paragraph beginning at page 49, line 4, and ending at line 10 with the following paragraph:

A16

--A suspension of 1.11 g (3 mmol) of 2,2-(2-methyl-4-isopropyl-1-cyclopentadienyl)-7-{(2,5-dimethyl-cyclopenta[1,2-b:4,3-b']dithiophene)}propane in 10 mL of ether and 50 mL of hexane was treated at –70°C with 3.8 mL of a 1.6 M n-BuLi solution (6.1 mmol). After the addition, the reaction mixture was allowed to warm to 0°C and added of 0.75 g (3.2 mmol) of $ZrCl_4$. The resulting mixture was allowed to reach room temperature and stirred overnight. Then the yellow precipitate obtained was filtered, washed twice with ether, dried and finally recrystallyzed from CH_2Cl_2.--

In the Claims

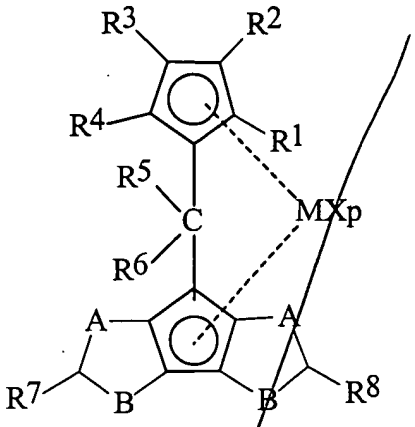
Please amend claims 1-4, 6-8, 10, 13, and 15-26 to read as follows:

SUB B1

A17

--1. (Amended) A process for the preparation of polymers of ethylene comprising the polymerization reaction of ethylene and optionally one or more olefins in the presence of a catalyst comprising the product obtained by contacting:

(A) a metallocene compound of formula (I):



(I)

wherein

the rings containing A and B have a double bond in the allowed position having an aromatic character;

A and B are selected from sulfur (S), oxygen (O) or CR^9, R^9 being hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements, with the proviso that if A is S or O, B is CR^9 or if B is S or O, A is CR^9;

R^1, R^2, R^3, R^4, R^5, R^6, R^7, and R^8 which may be the same as or different from each other, are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements, and at least two adjacent substituents R^1 and R^2, R^3 and R^4, or R^5 and R^6 can form a ring comprising 4 to 8 atoms, optionally bearing substituents;

M is an atom of a transition metal selected from group 3, 4, 5, 6 or the lanthanide or actinide groups in the Periodic Table of the Elements,

X, which may be the same as or different from each other, is hydogen, halogen atom, a R^{10}, OR^{10}, OSO_2CF_3, $OCOR^{10}$, SR^{10}, NR^{10}_2 or PR^{10}_2 group, wherein the substituents R^{10} are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements;

p is an integer of from 1 to 3, being equal to the oxidation state of the metal M minus 2;

with the proviso that said metallocene compound is different from: isopropylidene(cyclopentadienyl)-7-(cyclopentadienyl-[1,2-b:4,3-b']-dithiophene)zirconium dichloride;

and

(B) at least one of an alumoxane and a compound capable of forming an alkyl metallocene cation.

2. (Amended) The process according to claim 1, wherein in the metallocene compound of formula (I) the transition metal M is selected from titanium, zirconium or hafnium.

3. (Amended) The process according to claim 1, wherein in the metallocene compound of formula (I) the X substituents are chlorine atoms or methyl groups.

4. (Amended) The process according to claim 1, wherein in the metallocene compound of formula (I) A and B are sulfur or a CH group, either A or B being different from CH, R^5 and R^6 are C_1-C_{20}-alkyl groups, and R^7 is equal to R^8.

6. (Amended) The process according to claim 1, wherein said alumoxane is obtained by contacting water with an organo-aluminium compound of formula $H_jAlR^{12}_{3-j}$ or $H_jAl_2R^{12}_{6-j}$, where R^{12} substituents, same or different, are hydrogen atoms, C_1-C_{20}-alkyl, C_3-C_{20}-cyclalkyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl or C_7-C_{20}-arylalkyl, optionally containing silicon or germanium atoms with the proviso that at least one R^{12} is different from halogen, and j ranges from 0 to 1, being also a non-integer number.

7. (Amended) The process according to claim 6, wherein said alumoxane is methylalumoxane (MAO), tetra-(isobutyl)alumoxane (TIBAO), tetra-(2,4,4-trimethyl-pentyl)alumoxane (TIOAO), tetra-(2,3-dimethylbutyl)alumoxane (TDMBAO) or tetra-(2,3,3-trimethylbutyl)alumoxane (TTMBAO).

8. (Amended) The process according to claim 1, wherein the compound capable of forming a metallocene alkyl cation is a compound of formula D^+E^-, wherein D^+ is a Brønsted acid, able to give a proton and to react irreversibly with a substituent X of the metallocene of formula (I) and E^- is a compatible anion, which is able to stabilize the active catalytic species originating from the reaction of the two compounds, and which is sufficiently labile to be able to be removed by an olefinic monomer.

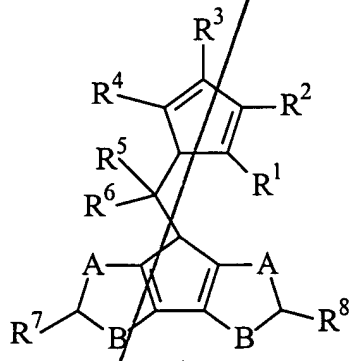
10. (Amended) The process according to claim 1, wherein the process is carried out

in the presence of an alpha-olefin selected from propylene, 1-butene, 1-pentene, 1-hexene, 4-methyl-1-pentene, 1-octene, 1-decene or 1-dodecene.

13. (Amended) The process according to claim 1, wherein the process is carried out in the presence of a cyclic comonomer.

15. (Amended) The process according to claim 13, wherein the molar content of the cyclic comonomer is between 0 mol% and 30 mol%.

16. (Amended) A process for the preparation of a ligand of formula (II):



(II)

or its double bond isomers,

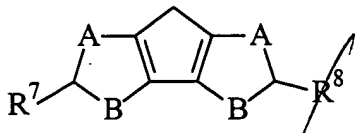
wherein

A and B are selected from sulfur (S), oxygen (O) or CR^9, R^9 being hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements, with the proviso that if A is S or O, B is CR^9 or if B is S or O, A is CR^9;

R^1, R^2, R^3, R^4, R^5, R^6, R^7, and R^8 which may be the same as or different from each other, are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements, and at least two adjacent substituents R^1 and R^2, R^3 and R^4, or R^5 and R^6 can form a ring comprising 4 to 8 atoms, optionally bearing substituents;

comprising the following steps:

i) treating the compound of formula (III) with at least one equivalent of a base;



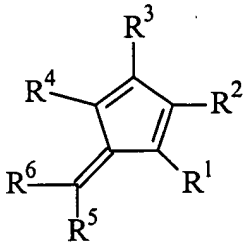
(III)

wherein the rings containing A and B have a double bond in the allowed position having an aromatic character;

wherein A and B are selected from sulfur (S), oxygen (O) or CR^9, R^9 being hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements, with the proviso that if A is S or O, B is CR^9 or if B is S or O, A is CR^9;

R^7, and R^8 which may be the same as or different from each other, are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements;

ii) contacting the thus obtained corresponding anionic compound from step i) with a compound of formula (IV):



(IV)

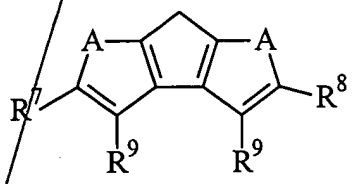
wherein

R^1, R^2, R^3, R^4, R^5, R^6 which may be the same as or different from each other, are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements, and at least two adjacent substituents R^1 and R^2, R^3 and R^4, or R^5 and R^6 can form a ring comprising 4 to 8 atoms, optionally bearing substituents; and

iii) treating the thus obtained product from step ii) with a protonating agent.

17. (Amended) The process for the preparation of a ligand of formula (II) according to claim 16 wherein the base used in step i) is selected from hydroxides, hydrides of alkali- and earth-alkali metals, metallic sodium, potassium or organometallic lithium salts, and the protonating agent used in step iii) is a quaternary ammonium salt.

18. (Amended) A process for preparing the compound of formula VII



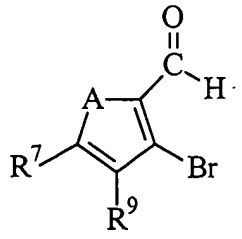
(VII)

wherein A is sulfur (S) or oxygen (O), R^9 is hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements;

R^7 and R^8 which may be the same as or different from each other, are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements;

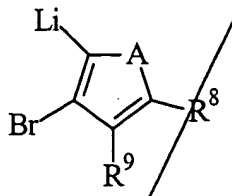
comprising the following steps:

i) treating a compound of formula (V):



(V)

wherein A is sulfur or oxygen, with a compound of formula (VI):



(VI)

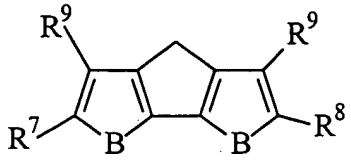
wherein A is sulfur or oxygen;

ii) contacting the thus obtained product from step i) with a reducing agent in a molar ratio between said reducing agent and the product obtained under i) of at least 1;

iii) contacting the product obtained under ii) with a compound selected from an organolithium compound, sodium or potassium in a molar ratio between said compound and the product obtained in step ii) of equal to or greater than 2; and

iv) treating the thus obtained product under step iii) with an agent selected from copper chloride, iodine or Mg/Pd, in order to obtain a compound of general formula (VII)

19. (Amended) A process for preparing the compound of formula (X)



(X)

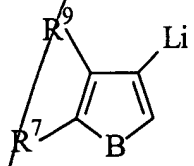
wherein B is sulfur or oxygen and R^9 is hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of

the Elements;

R^7 and R^8 which may be the same as or different from each other, are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements;

comprising the following steps:

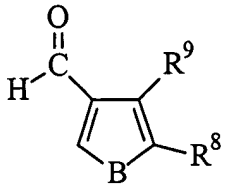
i) contacting a compound of formula (VIII):



(VIII)

wherein B is sulfur or oxygen,

with a compound of formula (IX):



(IX)

wherein B is sulfur or oxygen,

and subsequently treating with a neutralization agent;

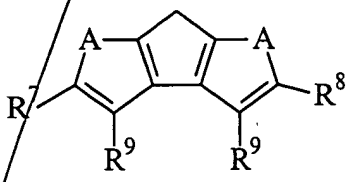
ii) treating the thus obtained product from step i) with a reducing agent in a molar ratio between said reducing agent and the compound obtained under i) of at least 1;

iii) contacting the thus obtained product from step ii) with a mixture of an organolithium compound and tetramethylethylenediamine (TMEDA) in a molar ratio between said mixture and the product obtained under ii) of at least 2; and

iv) contacting the thus obtained product from step iii) with an agent selected from copper chloride, iodine or Mg/Pd, in order to obtain a compound of

formula (X)

20. (Amended) A process for preparing the compound of formula (VII)



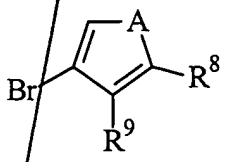
(VII)

wherein A is sulfur (S) or oxygen (O), R^9 is hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements;

R^7 and R^8 which may be the same as or different from each other, are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements;

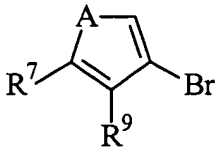
comprising the following steps:

i) contacting an equimolar mixture of compounds of formulae (XI) and (XII):



(XI)

and



(XII)

wherein A are sulfur or oxygen,

with a Lewis acid or a mixture of a Lewis acid and a protonic acid;

ii) treating the thus obtained product from step i) with CH_2O in a molar ratio

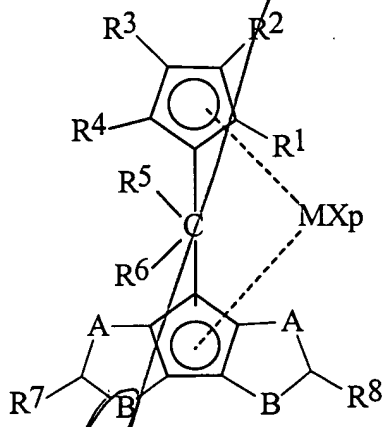
between said mixture and CH_2O of a range between 10:1 and 1:10;

iii) contacting the thus obtained product from step ii) with a compound selected from an organolithium compound, sodium or potassium; and

iv) contacting the thus obtained product from step iii) with an agent selected from copper chloride, iodine or Mg/Pd, in order to obtain a compound of general formula (VII).

21. (Amended) The process according to claim 20, wherein the Lewis acid is selected from zinc dichloride, cadmium dichloride, mercury dichloride, tin tetrachloride, trifluoroborane, zirconium tetrachloride, or titanium tetrachloride.

22. (Amended) A process for the preparation of a metallocene compound of the formula (I):



(I)

wherein

the rings containing A and B have a double bond in the allowed position having an aromatic character;

A and B are selected from sulfur (S), oxygen (O) or CR^9, R^9 being hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements, with the proviso that if A is S or O, B is CR^9 or if B is S or O, A is CR^9;

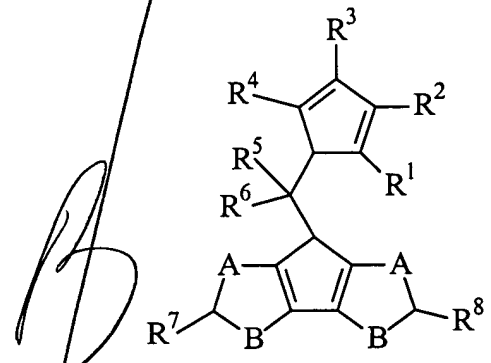
R^1, R^2, R^3, R^4, R^5, R^6, R^7, and R^8 which may be the same as or different from each other, are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to

groups 13 or 15-17 of the Periodic Table of the Elements, and at least two adjacent substituents R^1 and R^2, R^3 and R^4, or R^5 and R^6 can form a ring comprising 4 to 8 atoms, optionally bearing substituents;

with the proviso that said metallocene compound is different from: isopropylidene(cyclopentadienyl)-7-(cyclopentadienyl-[1,2-b:4,3-b']-dithiophene)zirconium dichloride;

comprising the following steps:

a) contacting a compound of formula (II)



(II)

or its double bond isomers,

wherein

A and B are selected from sulfur (S), oxygen (O) or CR^9, R^9 being hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements, with the proviso that if A is S or O, B is CR^9 or if B is S or O, A is CR^9;

R^1, R^2, R^3, R^4, R^5, R^6, R^7, and R^8 which may be the same as or different from each other, are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements, and at least two adjacent

substituents R^1 and R^2 , R^3 and R^4, or R^5 and R^6 can form a ring comprising 4 to 8 atoms, optionally bearing substituents;

with a base, wherein the molar ratio between said base and the compound of formula (II) is at least 2;

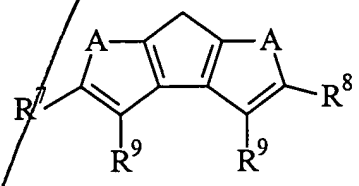
b) contacting with a compound of formula MX_{p+2},

wherein M is an atom of a transition metal from group 3, 4, 5, 6 or the lanthanide or actinide groups in the Periodic Table of the Elements,

X, which may be the same as or different from each other, is hydogen, halogen atom, a R^{10}, OR^{10}, OSO_2CF_3, $OCOR^{10}$, SR^{10}, NR^{10}_2 or PR^{10}_2 group, wherein the substituents R^{10} are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements; and

p is an integer being equal to the oxidation state of the metal M minus 2.

23. (Amended) A process for preparing the compound of formula (VII)



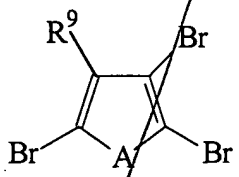
(VII)

wherein A is sulfur (S) or oxygen (O), R^9 is hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements;

R^7 and R^8 which may be the same as or different from each other, are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements;

comprising the following steps:

i) contacting a compound of formula (XIII):

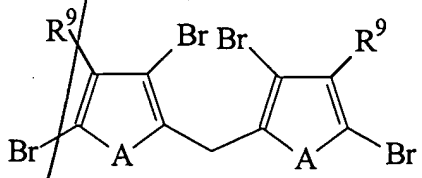


(XIII)

A21

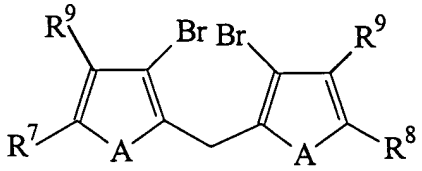
with a base selected from an organolithium compound, sodium or potassium; treating with a formic ester, wherein the molar ratio between said ester and the compound of formula (XIII) is at least 1:2, and subsequently treating the obtained product with a reducing agent in order to obtain a compound of formula (XIV):

SUB B7



(XIV)

ii) contacting the compound of formula (XIV) with a base selected from an organolithium compound, sodium or potassium and subsequently treating the dimetallated compound with an alkylating agent to obtain the compound of formula (XV);

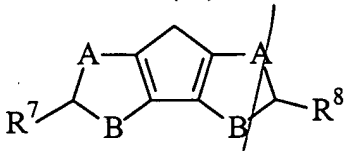


(XV)

and

iii) contacting the alkylated compound obtained by step ii) with a coupling agent selected from copper chloride, iodine or Mg/Pd in order to obtain the compound of formula (VII).

24. (Amended) A compound of formula (III)

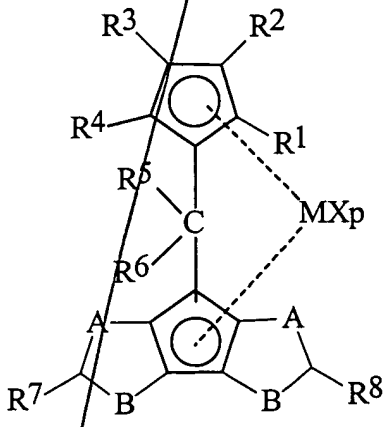


(III)

wherein the rings containing A and B have a double bond in the allowed position having an aromatic character; A and B are selected from sulfur (S), oxygen (O) or CR^9, R^9 being hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements, with the proviso that if A is S or O, B is CR^9 or if B is S or O, A is CR^9;

and R^7, and R^8 which may be the same as or different from each other, are a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements.

25. (Amended) A metallocene compound of formula (I):



(I)

wherein

A and B are selected from sulfur (S), oxygen (O) or CR^9, R^9 being hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements, with the proviso that if A is S or O, B is CR^9 or if B is S or O, A is CR^9;

R^1, R^2, R^3, R^4, R^5, R^6, R^7, and R^8 which may be the same as or different from each other, are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements, and at least two adjacent substituents R^1 and R^2, R^3 and R^4, or R^5 and R^6 can form a ring comprising 4 to 8 atoms, optionally bearing substituents;

M is an atom of a transition metal from group 3, 4, 5, 6 or the lanthanide or actinide groups in the Periodic Table of the Elements,

A21

X, which may be the same as or different from each other, is hydogen, halogen atom, a R^{10}, OR^{10}, OSO_2CF_3, $OCOR^{10}$, SR^{10}, NR^{10}_2 or PR^{10}_2 group, wherein the substituents R^{10} are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements;

p is an integer of from 1 to 3, being equal to the oxidation state of the metal M minus 2;

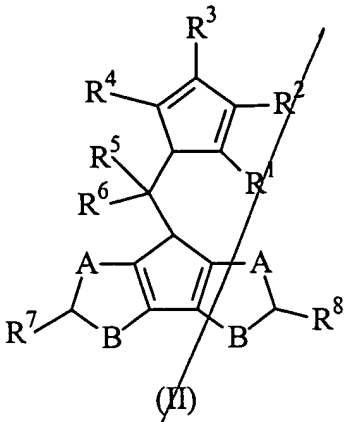
with the proviso that said metallocene compound is different from:

SUB B7

isopropylidene(cyclopentadienyl)-7-(cyclopentadithiophene)zirconium dichloride,
isopropylidene(3-methyl-cyclopentadienyl)-7-(cyclopentadithiophene)zirconium dichloride;
isopropylidene(3-ethyl-cyclopentadienyl)-7-(cyclopentadithiophene)zirconium dichloride;
isopropylidene(3-t-butyl-cyclopentadienyl)-7-(cyclopentadithiophene)zirconium dichloride;
isopropylidene(3-n-butyl-cyclopentadienyl)-7-(cyclopentadithiophene)zirconium dichloride;
isopropylidene(3-trimethylsilyl-cyclopentadienyl)-7-(cyclopentadithiophene)zirconium dichloride and
isopropylidene (3-i-propylcyclopentadienyl)-7-(cyclopentadithiophene)zirconium dichloride.

26. (Amended) A ligand of formula (II):

A21



(II)

or its double bond isomers,

wherein the rings containing A and B have double bonds in any of the allowed positions, having an aromatic character and

A and B are selected from sulfur (S), oxygen (O) or CR^9, R^9 being hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements, with the proviso that if A is S or O, B is CR^9 or if B is S or O, A is CR^9;

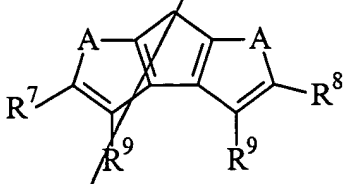
SUB B7

R^1, R^2, R^3, R^4, R^5, R^6, R^7, and R^8 which may be the same as or different from each other, are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements, and at least two adjacent substituents R^1 and R^2, R^3 and R^4, or R^5 and R^6 can form a ring comprising 4 to 8 atoms, optionally bearing substituents;

with the proviso that said ligands are different from:
isopropylidene(cyclopentadiene)-7-(cyclopentadithiophene),
isopropylidene(3-methyl-cyclopentadiene)-7-(cyclopentadithiophene);
isopropylidene(3-ethyl-cyclopentadiene)-7-(cyclopentadithiophene);
isopropylidene(3-t-butyl-cyclopentadiene)-7-(cyclopentadithiophene);
isopropylidene(3-n-butyl-cyclopentadiene)-7-(cyclopentadithiophene);
isopropylidene(3-trimethylsilyl-cyclopentadiene)-7-(cyclopentadithiophene) and
isopropylidene (3-i-propylcyclopentadiene)-7-(cyclopentadithiophene).--

Please add the following new claim 27:

--27 (New) A process for preparing the compound of formula (VII)



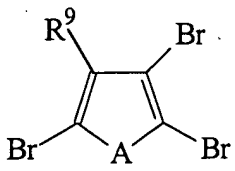
(VII)

wherein A is sulfur (S) or oxygen (O), R^9 is hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements;

R^7 and R^8 which may be the same as or different from each other, are hydrogen, a C_1-C_{20}-alkyl, C_3-C_{20}-cycloalkyl, C_2-C_{20}-alkenyl, C_6-C_{20}-aryl, C_7-C_{20}-alkylaryl, or C_7-C_{20}-arylalkyl radical, optionally containing heteroatoms belonging to groups 13 or 15-17 of the Periodic Table of the Elements;

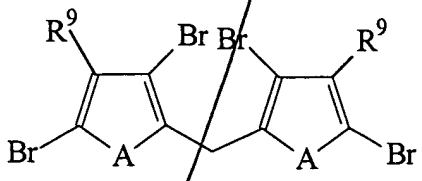
comprising the following steps:

i) contacting a compound of formula (XIII):



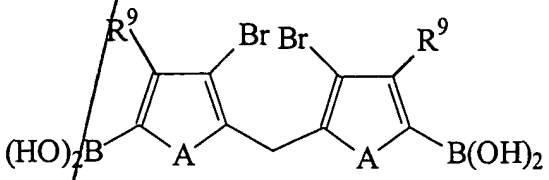
(XIII)

with a base selected from an organolithium compound, sodium or potassium; treating with a formic ester, wherein the molar ratio between said ester and the compound of formula (XIII) is at least 1:2, and subsequently treating the obtained product with a reducing agent in order to obtain a compound of formula (XIV):



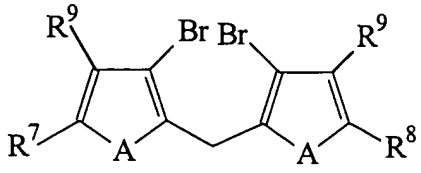
(XIV)

ii) contacting the compound of formula (XIV) with a base selected from an organolithium compound, sodium or potassium and subsequently treating the dimetallated compound with an ester of boric acid and a protonating agent in order to obtain the compound of formula (XVI):



(XVI)

and subsequently contacting with a mixture of an alkylating agent in the presence of an transition metal complex compound for obtaining the compound of formula (XV);



(XV)

and

iii) contacting the alkylated compound obtained by step ii) with a coupling agent